

**Claims**

1. A truck assembly for a skateboard having a skateboard deck, said truck assembly having a main body adapted to be mounted to the underside of said skateboard deck, an axle for supporting a pair of skateboard wheels, means for mounting said axle to said main body in such a manner as to allow pivotal movement of said axle in opposite directions in a steering plane extending transversely of said main body and means for selectively adjusting said steering plane to vary the steering characteristics of said truck assembly.

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2. A truck assembly as claimed in claim 1 and including pivot means intermediate the opposite ends of said axle for mounting said axle to said main body, said pivot means defining the plane of pivotal movement of said wheel axle, and means for selectively adjusting said pivot means to adjust the plane of movement of the said axle.

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3. A truck assembly as claimed in claim 2 and including support means for said pivot means, said pivot support means being mounted to said main body for rotation about an axis extending transversely of said main body.

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4. A truck assembly as claimed in claim 3 wherein said pivot means comprises a pair of opposite trunnions and wherein said pivot means comprises a trunnion support boss, said main body includes a transversely extending bore and said trunnion support boss being supported for rotation in said bore.

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5. A truck assembly as claimed in claim 4 and including an adjustment arm extending from said support boss, and locating means for locating and defining different positions of said adjustment arm and said support boss.

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6. A truck assembly as claimed in claim 5 wherein said locating means comprise a plurality of apertures or holes, and wherein said adjustment arm includes a pin which can locate in a selected aperture or hole to locate said support boss in a desired rotational attitude.

7. A truck assembly as claimed in any one of claims 1 to 6 and including biasing means for opposing said pivotal movement of said axle in opposite directions in said steering plane.

5 8. A truck assembly as claimed in claim 7 wherein said biasing means comprise resilient means on both sides of the main body and extending between, and being connected to, said main body and axle.

9. A truck assembly for a skateboard having an elongated skateboard deck, said 10 truck assembly having a main body adapted to be mounted to the underside of said skateboard deck, a wheel assembly having an axle and a pair of wheels rotatably mounted to opposite ends of said axle, pivot means intermediate said ends of said axle mounting said axle to said main body for pivotal movement about an axis extending substantially normally to said axle to thereby permit pivotal movement of said axle in or 15 parallel to a plane normal to said axis, and means for selectively adjusting said pivot axis to vary the plane of movement of said axle whereby to change the steering characteristics of said truck assembly.

10. A truck assembly as claimed in claim 9 wherein said main body has a 20 longitudinal axis for longitudinal alignment with said skateboard deck and wherein said pivot axis of said wheel axle is adjustable in a plane passing through said longitudinal axis of said main body.

11. A truck assembly as claimed in claim 10 wherein said pivot means comprises 25 trunnions extending to opposite sides of said wheel axle and there being provided means for supporting said trunnions for said pivotal movement of said axle about said pivot axis.

12. A truck assembly as claimed in claim 11 wherein said trunnion support means 30 comprises a support boss mounted in a bore in said main body for rotational movement about an axis extending transversely of said main body and normal to said pivot axis of said axle and means for selectively adjusting the rotational position of said boss relative

to said main body.

13. A truck assembly as claimed in claim 12 and including an adjustment arm extending from said support boss, said adjustment arm being selectively adjustable to  
5 adjust the rotational position of said support boss.

14. A truck assembly as claimed in claim 13 and including a plurality of arm locating means and wherein said adjustment arm include means for cooperation, or for alignment, with a selected said locating means.

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15. A truck assembly as claimed in claim 14 wherein said locating means comprise a plurality of apertures or holes, and wherein said adjustment arm includes a pin for location in a selected aperture or hole.

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16. A truck assembly as claimed in claim 15 wherein said pin is spring loaded to cooperate with a selected aperture or hole to positively locate and hold said arm in a selected position.

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17. A truck assembly according to claim 16 wherein said arm extends radially from said boss relative to the axis of rotational movement thereof and wherein said locating means are arranged along an arc or curve on said main body and centered on said axis of rotational movement of said boss.

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18. A truck assembly as claimed in any one claims to 9 to 17 and including biasing means for opposing movement of said axle in opposite directions about said pivot axis.

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19. A truck assembly as claimed in claim 18 wherein said biasing means comprise pairs of springs on both sides of said main body, said springs on each side of said main body extending between, and being connected to, opposite ends of said main body and said axle.

20. A truck assembly for use with a skateboard having a skateboard deck, said truck assembly having a main body, and mounting means for mounting said main body to said skateboard deck, said mounting means comprising a mounting member adapted to be mounted directly to the underside of said skateboard deck, said mounting member having means for cooperation with said main body for mounting said truck assembly to said skateboard, or with a spacer for mounting said truck assembly via said spacer to said skateboard deck.

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21. A truck assembly as claimed in claim 20 wherein said main body of said truck assembly is adapted for slidable engagement with said mounting member or said spacer and wherein said spacer is adapted for slidable engagement with said mounting member.

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22. A truck assembly as claimed in claim 21 wherein said mounting member and said main body have complementary coupling means and wherein said spacer has coupling means complementary to said coupling means of said main body and said mounting member.

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23. A truck assembly as claimed in claim 22 wherein said complementary coupling means comprise a complementary rib or tongue/groove configuration which permits said main body, mounting member and spacer to be slidably interengaged.

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24. A truck assembly as claimed in claim 23 and including releasable latch means for latching said main body to said mounting member or said spacer and said spacer to said mounting member.

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25. A skateboard having an elongated skateboard deck and a pair of truck assemblies secured to the underside of said deck adjacent opposite ends of said deck, each said truck assembly having an axle supporting a pair of wheels at opposite ends thereof, and wherein said axle of at least one said truck assembly is mounted to said skateboard deck for pivotal movement in a steering plane extending transversely to the longitudinal axis of said skateboard deck to allow steering of said skateboard and there being provided means for selectively adjusting the inclination of said steering plane relative to

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said longitudinal axis of said skateboard deck to enable variation of the steering characteristics of said skateboard.

26. A skateboard as claimed in claim 25 wherein said axle is supported for pivotal steering movement in said steering plane about a pivot axis defining said plane of pivotal movement of said axle, said pivot axis lying in a plane extending longitudinally of said skateboard deck and normal thereto, and wherein said means for selectively adjusting the plane of pivotal movement of said axle comprises means for rotating said pivot axis in said longitudinally extending plane.

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27. A skateboard as claimed in claim 26 wherein said at least one truck assembly includes a main body, said main body being mounted to said skateboard deck in longitudinal alignment with the longitudinal axis of said skateboard deck, and pivot support means mounted to said main body for rotation about an axis extending transversely of said longitudinal axis, said pivot support means supporting said axle to said main body for pivotal movement about said pivot axis.

28. A skateboard as claimed in claim 27 and including an adjustment arm for adjusting the rotational position of said pivot support means relative to said main body for adjusting the pivot axis of said axle, and locating means for locating said adjustment arm in a series of spaced positions.